

IN THE SPECIFICATION

[0012] Figure 1 is a perspective view of the lift and transport apparatus in the expanded position;

Figure 2 is a top plan view of the apparatus of Figure 1;

Figure 2A is an enlarged sectional view taken along line 2A-2A of Figure 2;

Figure 3 is a front elevational view of the apparatus of Figure 1;

Figure 4 is a rear elevational view of the apparatus of Figure 1;

Figure 5 is a side elevational view of the right side of the apparatus of Figure 1;

Figure 6 is a side elevational view of the left side of the apparatus of Figure 1;

Figure 7 is a bottom plan view of the apparatus of Figure 1;

Figure 8 is a perspective view of a modification of the lift and transport apparatus in the contract position;

Figure 9 is a top plan view of the apparatus of Figure 8;

Figure 9A is an enlarged sectional view taken along the line 9A-9A of Figure 9;

Figure 10 is front elevational view of the apparatus of Figure 8;

Figure 11 is a rear elevational view of the apparatus of Figure 8;

Figure 12 is a side elevational view of the right side of the apparatus of Figure 8;

Figure 13 is a side elevational view of the left side of the apparatus of Figure 8;

Figure 14 is a bottom plan view of the apparatus of Figure 8;

Figure 15 is a perspective view with exploded parts of the support and anchor pins for the platform of the wheelchair lift and transport apparatus;

Figure 16 is an exploded perspective view of the adjustable headrest of the wheelchair lift and transport apparatus of Figures 1 and 8;

Figure 17 is an exploded perspective view of the apparatus of Figure 8;

Figure 18 is a perspective view, partly sectioned, of a motor vehicle equipped with the

apparatus of Figure 8;

Figure 19 is a front elevational view of Figure 18 showing the apparatus in the retracted position;

Figure 20 is a front elevational view of Figure 18 showing the apparatus in the expanded position;

Figure 21 is a perspective view, partly sectioned, of a motor vehicle equipped with the apparatus of Figure 8 in the expanded position;

Figure 22 is a perspective view of the platform of the lift and transport apparatus coupled to the frame of a wheelchair;

Figure 23 is a top plan view of Figure 22; [[and]]

Figure 24 is a front elevational view of ~~Figure 22; Figure 22; and~~

~~Figure 25 is a perspective view of the platform supporting a wheelchair.~~

[0021] In use, as shown in ~~Figures 21 to 24~~ Figures 21 to 25, the lift assembly 31 is moved to its out or loading position with platform 32 on the ground adjacent the side of vehicle 129. Vehicle side door 73 being connected to lift assembly 31 is supported laterally of vehicle 129 to allow a wheelchair to back onto platform 32. As shown in ~~Figure 22~~ Figures 22 to 25, wheelchair frame 131 has a cross bar 132 supporting a pair of downwardly extended anchor bolts 133 and 134. The wheelchair is moved rearwardly positioning anchor bolts 133 and 134 in slot 59. Stop bolt 62 limits rearward movement of the wheelchair with the drive wheels 136 and 137 and caster wheels 138 and 139 positioned on platform 32. An example of a wheelchair having frame 131 is disclosed by P.E. Schlangen in U.S. Patent No. 6,375,209. Actuator 43 is activated to lift platform 32 with the wheelchair and person on the wheelchair from the ground or first position to a second elevated position adjacent the side of vehicle 129. Motor controls 141 and 142, such as electric switches, mounted on the inside of door 73 are used by the person on the wheelchair to

activate the actuator motors 53 and 123. Motor controls can alternatively be mounted on a support secured to platform 32. When motor 53 is operating to either raise or lower platform 32 and wheelchair thereon, motor 123 is inactive. When motor 123 is operating to laterally transport platform 32 and wheelchair thereon from the second position to a third position within vehicle 129, motor 123 is inactive. Motor 123 is only operated when platform is in the raised or second position. Motor control for motors 53 and 123 includes a remote signal device useable by the person on the wheelchair to activate motor 123 to open and close door 73 and to raise and lower platform 32. This allows the person in the wheelchair to operate the lift and transport apparatus 30 from a location remote from vehicle 129. When platform 32 and wheelchair thereon is in the third position within the vehicle, motor 53 is activated to lower platform 32 to a fourth position in locking engagement with fixed upright pins 36, 37, 38 and 39 secured to floor 35. Platform 32 has four holes 143, 144, 145, and 146 for accommodating the upper ends of pins 36-39. Pins 36-39 support platform 32, wheelchair and person in the wheelchair on the vehicle floor 35. This relieves the weight of platform 32 wheelchair, and person in the wheelchair from lift and transport apparatus 30. The vertical height of pins 36-39 and nuts thereon are adjustable to change the elevation of platform 32 relative to floor 35 and level platform 32 to accommodate different persons and wheelchairs. Lift assembly 31 prevents platform 32 from lifting off pins 36-39 thereby fixing the location of the wheelchair in the vehicle driver's position behind the steering wheel. A lateral stop arm 148 secured to a side wall 149 of floor 35 operates as a stop for the inside drive wheel of the wheelchair preventing the wheelchair from moving forward. Stop arm 148 in combination with platform 32 on anchor pins 36-39 and lift assembly 31 holds the wheelchair in a fixed position within the vehicle. The wheelchair is prevented from moving forward, backward, and in lateral and vertical directions.